

**REMARKS**

These Remarks are responsive to the Office Action mailed March 12, 2004 (“Office Action”). Applicants respectfully request reconsideration of the rejections of claims 1-9 for at least the following reasons.

**STATUS OF THE CLAIMS**

Claims 1-9 are pending in the application.

No new matter is added by this response.

**CLAIM REJECTIONS**

The Office Action continues rejections of claims 1 and 3-6, under 35 U.S.C. § 102(b), as allegedly being anticipated by U.S. Patent No. 5,516,497, issued to Speronello et al. (“Speronello et al.”). The Office Action continues the rejections of claims 2 and 7-9, under 35 U.S.C. § 103(a), as allegedly being unpatentable over Speronello et al. in view of U.S. Patent No. 6,221,324, issued to Coq et al. (“Coq et al.”).

Applicants respectfully submit that claims 1-9 distinguish over the cited references. Claims 1-9 comprise “a gas comprising NO<sub>x</sub>, N<sub>2</sub>O, oxygen, and water.” Speronello et al. does not disclose or teach such a gas comprising NO<sub>x</sub> and N<sub>2</sub>O. Coq et al. does not remedy this deficiency of teaching and disclosure. Accordingly, Speronello et al. and Coq et al.--either by themselves or in combination--fail to anticipate and/or render the claims unpatentable for at least the reason that they do not disclose or teach a gas comprising both NO<sub>x</sub> and N<sub>2</sub>O.

Although Applicants have asserted that NO<sub>x</sub> (as disclosed by Speronello et al.) should not be construed to include nitrous oxide and have presented citations to references demonstrating that NO<sub>x</sub> only refers to NO<sub>2</sub> and NO, the Office Action continues to maintain that nitrous oxide is considered a nitrogen oxide. As basis for this contention, the Office Action cites U.S. Patent No. 5,589,147 as supporting the allegation that nitrous oxide is considered a nitrogen oxide. However,

U.S. Patent No. 5,589,147 specifically defines the definition of  $\text{NO}_x$  in a manner that changes the definition of  $\text{NO}_x$  from that normally accepted in the art. U.S. Patent No. 5,589,147 states that “*For the purposes of the present invention*,  $\text{NO}_x$  will be used herein to represent nitric oxide, nitrogen dioxide, and nitrous oxide, as well as mixtures containing these gases.” (Col. 1, ll. 33-35, emphasis added) Such language itself (“For the purposes of the present invention”) recognizes that the specification is according a different definition to  $\text{NO}_x$  than the normal definition utilized and recognized in the art. As such, the specification of U.S. Patent No. 5,589,147 recognizes that they are changing the definition of  $\text{NO}_x$  to be different from the definition of  $\text{NO}_x$  used in normal practice of the art. As such, the reference should not be used as supporting the contentions of the Office Action that nitrous oxide is considered a nitrogen oxide in the art.

As further basis to refute the contention of the Office Action that nitrous oxide is a nitrogen oxide, Applicants cite to the Kirk-Othmer Encyclopedia of Chemical Technology (John Wiley & Sons)--a noted reference in the art. As a courtesy, Applicants provide copies of several pages from the Encyclopedia of Chemical Technology showing that  $\text{NO}_x$  only refers to  $\text{NO}_2$  and  $\text{NO}$ , and not to  $\text{N}_2\text{O}$ . For example, Table 5 on pages 633 and 634 (Vol. 1) provides support by reciting “nitrogen oxides ( $\text{NO}$  and  $\text{NO}_2$ ).” Page 639 (Vol. 1) states that “In air pollution terminology nitrogen oxides ( $\text{NO}_x$ ) refer to two gaseous oxides of nitrogen, nitrogen dioxide ( $\text{NO}_2$ ) and nitric oxide ( $\text{NO}$ ).” Page 294 (Vol. 4) states that “ $\text{NO}_x$  [is] the sum of  $\text{NO}$  and  $\text{NO}_2$  . . . .” Page 527 (Vol. 9) states that “nitrogen dioxide  $\text{NO}_2$  and nitric oxide  $\text{NO}$  . . . constitute the  $\text{NO}_x$  (measured and expressed as  $\text{NO}_2$ ) . . . .”

Further, Applicants note that in Table 4 of Kirk-Othmer Encyclopedia of Chemical Technology, on page 885 (Vol. 15),  $\text{N}_2\text{O}$  is classified as a nitride. This illustrates the difference of chemical structures between  $\text{NO}_2$  and  $\text{NO}$  (i.e., classical oxides) on the one hand and  $\text{NO}_x$  on the other hand. As such, all of these oxides do not belong to the same family as suggested and

contended by the Office Action.

The Office Action also states that the recitation “from a gas comprising NO<sub>x</sub>, N<sub>2</sub>O, oxygen and water” has not been given patentable weight because the recitation occurs in the preamble and a preamble is generally not accorded any patentable weight. Accordingly, upon entry of the above claim amendments, claim 1 has been amended to move the recitation of “from a gas comprising NO<sub>x</sub>, N<sub>2</sub>O, oxygen and water” from the preamble into the body of the of the claim recitation. As such, this limitation even more clearly provides a distinction over Speronello et al. and Coq et al. which do not teach or disclose a gas comprising NO<sub>x</sub> and N<sub>2</sub>O.

For at least the foregoing reasons, Applicants submit that Speronello et al. and Coq et al. do not teach and disclose all of the limitations of claims 1-9 and, therefore, the rejections of claims 1-9 in view of these references is improper. Applicants respectfully request that the rejections of claims 1-9 be removed from the application.

**CONCLUSION**

Applicants respectfully submit that the application is in condition for allowance and respectfully request a notice of allowance for the pending claims. Should the Examiner determine that any further action is necessary to place this application in condition for allowance the Examiner is kindly requested and encouraged to telephone Applicants' undersigned representative at the number listed below.

A check for a ONE MONTH extension is attached to this Response. In the event any other fees are due, the Commissioner is hereby authorized to charge the undersigned's Deposit Account No. 50-0206.

Respectfully submitted,

Date: July 12, 2004

By: Robert M. Schulman

Robert M. Schulman  
Registration No. 31,196

David H. Milligan  
Registration No. 42,893

HUNTON & WILLIAMS LLP  
Intellectual Property Department  
1900 K Street, N.W.  
Suite 1200  
Washington, D.C. 20006-1109  
(202) 955-1500 (telephone)  
(202) 778-2201 (facsimile)

RMS/DHM/cbt